Mathematics for Business and Industry

Course Overview:
This course enables the student to explore mathematical content for personal, business, and industrial use. Math concepts and skills are applied through study and problem-solving activities in real-world situations in the following areas: banking, measurement, borrowing and investing, consumer purchases, and financial management. Appropriate business forms are used in each unit. Leadership development will be provided through FBLA or DECA.

Guiding/Essential Questions:

- **What roles do math skills play in career opportunities?**
- Use the touch method on electronic calculators to solve real-world mathematical problems which relate to business and industry.
- Use mathematical operations to enable students to understand gross and net income and different methods of earning income.
- Research and analyze career opportunities requiring application of math skills.
- Demonstrate employability and social skills relative to the career cluster.
- Utilize activities of FBLA as an integral component of course content and leadership development.

- **What is the importance of using technology (including but not limited to electronic calculator, pc, etc.) in computing interest, finance charges, installments, and salary calculations.**

- Use calculators to solve real world mathematical problems which relate to business and industry.
- Apply math and communication skills with the technical content.
- Use mathematical operations to enable students to understand gross and net income and different methods of earning income.
- Demonstrate mathematical reasoning in figuring and recording checking and savings account transactions.
- Use mathematical reasoning to compare cash purchases, credit cards, charge accounts, markups, and discounts.
- Demonstrate mathematical reasoning in calculating various types of loans, investments, and interest, including compound interest.

- **What is the importance of maintaining records of personal financial accounts?**
- Use mathematical operations to enable students to understand gross and net income and different methods of earning income.
- Demonstrate mathematical reasoning in figuring and recording checking and savings account transactions.
- Use mathematical reasoning to compare cash purchases, credit cards, charge accounts, markups, and discounts.
- Demonstrate mathematical reasoning in calculating various types of loans, investments, and interest, including compound interest.
- Design and manipulate spreadsheets and graphs according to the availability of technology.
- Use mathematical problem solving to figure the costs involved in purchasing and maintaining a vehicle and a home and the methods of figuring depreciation.
- Identify and compare various types of insurance.

- **How do you make sound consumer decisions in relation to purchasing and investing?**
- Use mathematical operations to enable students to understand gross and net income and different methods of earning income.
- Demonstrate mathematical reasoning in calculating various types of loans, investments, and interest, including compound interest.
- Use mathematical problem solving to figure the costs involved in purchasing and maintaining a vehicle and a home and the methods of figuring depreciation.
- Identify and compare various types of insurance.
- Utilize activities of FBLA as an integral component of course content and leadership development.

- **How do you relate mathematical applications to managerial relations?**
- Use the touch method on electronic calculators to solve real-world mathematical problems which relate to business and industry.
- Apply math and communication skills within the technical content.
- Use mathematical operations to enable students to understand gross and net income and different methods of earning income.
- Recognize the opportunity to participate in Future Leaders of America as a productive group member.
- Use mathematical reasoning to compare cash purchases, credit cards, charge accounts, markups, and discounts.
- Design and manipulate spreadsheets and graphs according to the availability of technology.
- Demonstrate mathematical reasoning relating to personnel, production, sales, marketing, warehousing, and distribution.
- Demonstrate employability and social skills relative to the career cluster.
- Utilize activities of FBLA as an integral component of course content and leadership development.

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